|  |  |  |  |
| --- | --- | --- | --- |
| **+++++++++++++++** | **DNA** | **mRNA** | **tRNA** |
| Where found? | Nucleus | Nucleus---> ER  ---> Ribosome | Cytoplasm  --->Ribosome |
| Structure | Double strand | Single strand | Single strand of 3 |
| Thymine or Uracil | Thymine | Uracil | Uracil |
| Type of sugar | Deoxyribose | Ribose | Ribose |
| Function | Instructions for making protein | Delivers instructions to ribosome | Transports amino acids to ribosome |

Transcription: DNA 🡪 mRNA

Molecules involved: DNA & mRNA

Where does it happen: Nucleus

What happens: DNA is used to build a molecule that carries the message to the

ribosome

Translation: mRNA code converted to correct amino acid sequence

Molecules involved: mRNA & tRNA

Where does it happen: cytoplasm/ribosome

What happens: tRNA pick up amino acids from the cytoplasm and brings them

to the ribosome & matches them up to the correct mRNA codon

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11. Start (AUG) and stop codons do not code for amino acids

12. Introns = long, non-coding sequences of DNA

Exons = regions of DNA that contain information that is expressed

(protein/trait)

***\*Introns are removed from mRNA before it can function to make a protein\****

1. **E**
2. **G**
3. **C**
4. **A**
5. **F**
6. **I**
7. **B**
8. **H**
9. **J**

**10.D**